

WHAT IS CLAIMED IS:

1. A composition comprising a plurality of distinct microbial species, wherein each constituent member of said plurality is:

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- (a) antagonistic against a plurality of microbial pathogens;
 - (b) non-pathogenic towards plants and animals;
 - (c) is tolerant of high temperatures;
 - (d) grows rapidly; and
 - (e) proliferates on a complex substrate.

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2. The composition according to Claim 1, wherein said plurality comprises at least one bacterial species and at least one fungal species.

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3. The composition according to Claim 2, wherein said plurality comprises at least 5 distinct microbial species.

4. The composition according to Claim 3, wherein said plurality comprises at least 5 bacterial species.

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5. The composition according to Claim 3, wherein said plurality comprises at least 2 fungal species.

6. The composition according to Claim 1, wherein said composition comprises a carrier.

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7. The composition according to Claim 6, wherein said carrier is a liquid.

8. The composition according to Claim 6, wherein said carrier is a solid.

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9. The composition according to Claim 1, wherein said plurality of microbial species has been proliferated on a complex substrate.

10. A composition comprising:

(a) a plurality of distinct microbial species made up of at least 5 different bacterial species and at least 2 different fungal species, wherein each constituent member of said plurality is:

- 5 (i) antagonistic against a plurality of microbial pathogens;
- (ii) non-pathogenic towards plants and animals;
- (iii) is tolerant of high temperatures;
- (iv) grows rapidly; and
- (v) proliferates on a complex substrate; and
- 10 (b) a carrier.

11. The composition according to Claim 10, wherein said carrier is a liquid.

12. The composition according to Claim 10, wherein said carrier is a solid.

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13. In an agricultural method, the improvement comprising:
applying to at least one of soil or plant tissue a composition according to Claim 1.

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14. A method of producing a composition according to Claim 1, said method comprising:

- (a) identifying a plurality of microbial species that are:
 - (i) antagonistic against a plurality of microbial pathogens;
 - (ii) non-pathogenic towards plants and animals;
 - (iii) tolerant of high temperatures;
 - 25 (iv) grows rapidly; and
 - (v) proliferates on a complex substrate; and
- (b) combining said plurality to produce said composition.

15. The method according to Claim 14, wherein said method further comprises
30 separately proliferating each species prior to said combining.

16. The method according to Claim 15, wherein said proliferating occurs in the presence of a complex substrate.

17. The method according to Claim 15, wherein said method further comprises
5 combining said composition with a carrier.

18. The method according to Claim 17, wherein said carrier is a fluid.

19. The method according to Claim 17, wherein said carrier is a solid.
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20. The method according to Claim 14, wherein said identifying comprises subjecting a candidate microbial species to a series of assays which identify whether the species has all of said (i)-(v) characteristics.